



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,279	03/25/2004	Wataru Asano	251116US2SRD	5106
22850	7590	08/08/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LU, TOM Y	
			ART UNIT	PAPER NUMBER
			2624	
			NOTIFICATION DATE	DELIVERY MODE
			08/08/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,279	<b>Applicant(s)</b> ASANO ET AL.	
	<b>Examiner</b> Tom Y. Lu	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-11, 13-22 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5, 7, 9, 11, 13-16, 20-21 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 10, 17-19 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. The amendment and written response filed 06/27/2008 has been entered and considered.
2. Claims 1-2, 12 and 23 were cancelled.
3. Claims 3, 5, 9, 17, 24, 25, 26 and 27 were amended.
4. Claims 3-11, 13-22 and 24-27 are pending..

***Response to Arguments***

5. Applicant's arguments with respect to claims 3, 5, 9, 17 and 24-27 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al ("Nakamura") (USPN 6,996,250 B2) in view of Yamakage et al ("Yamakage") (US Pub No. 2003/0091213 A1).

- a. As per claim 3, Nakamura discloses a digital watermark detection apparatus to detect watermark information embedded in an input image signal (abstract), comprising: an image-size-reduction unit configured to reduce an image size of the input image signal by reducing resolution of the input image signal and to generate a size reduced image signal (conversion device in a player, column 18,

lines 43-48); and a detector to detect the watermark information in the size-reduced image signal (column 23, lines 41-48). Nakamura's watermark detection process is different from the claimed. However, Yamakage teaches a watermark detector including: an extraction unit; a phase controller; a correlator; and an estimation unit (see figure 4). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Nakamura's system in light of Yamakage's watermark detection teachings because the result of the Nakamura and Yamakage combination would be completely predictable in that Yamakage's watermark detection unit is capable of detecting watermark on a SD image after conversion from a HD image, in which watermark was embedded. Additionally, a person of ordinary skill in the art would be motivated to perform the modification because Yamakage at paragraph [0006] teaches his watermark detection is suitable in digital video environment, and Yamakage's detection technique "can detect embedded watermark information against attacks such as cut-out, scaling rotation, and the like of an image, without increasing the arithmetic operation volume and circuit scale" (Yamakage: paragraph [0021]). The obviousness rationale advanced hereinabove is consistent with the criteria articulated in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

- b. As per claim 4, see figure 5 in Yamakage.
- c. As per claim 24, Nakamura teaches a receiving unit configured to receive the size-reduced image signal from the external device which generates the size-

Art Unit: 2624

reduced image signal by reducing resolution of the input image signal (hard disk 205 stores the converted image data). Yamakage teaches the rest of limitations as shown in figure 4. The motivation for combining is provided above.

- d. As per claim 27, Nakamura teaches the conversion takes place between HD image and SD image.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 5, 7, 9, 11, 13-16, 20-21 and 25-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 7,284,130 B2 in view of Nakamura.

- a. As per claim 5, claim 3 of 130’ patent teaches all the limitation in claim 5 except an image-size-reduction unit configured to reduce an image size of the input image signal by reducing resolution of the input image signal and to generate a

size-reduced image signal. Nakamura teaches such image-size-reduction unit (conversion device in a player, column 18, lines 43-48). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the watermark detection system in 130' patent in light of Nakamura's teachings because the result of the 130' patent and Nakamura combination would be completely predictable in that Nakamura provides the size-reduced image as the input image for the watermark detection system in 130' patent without any alteration to the watermark detection system in 130' patent. Additionally, a person of ordinary skill in the art would be motivated to perform such modification because the picture format conversion in Nakamura allows the watermark embedded in a HD image to be accurately detected in a SD image. The obviousness rationale advanced hereinabove is consistent with the criteria articulated in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

- b. As per claim 7, conversion from HD to SD is a downsampling process.
- c. As per claim 9, claim 3 or 4 or 5 of 130' patent teaches all the limitation in claim 9 except an image-size-reduction unit configured to reduce an image size of the input image signal by reducing resolution of the input image signal and to generate a size-reduced image signal. Nakamura teaches such image-size-reduction unit (conversion device in a player, column 18, lines 43-48). The motivation for combining is provided above.
- d. As per claim 11, see explanation in claim 7.

- e. As per claim 13, see claim 3 or 4 of 130' patent.
- f. As per claim 14, see claim 3 or 4 of 130' patent.
- g. As per claim 15, see claim 3 of 130' patent.
- h. As per claim 16, see claim 4 of 130' patent.
- i. As per claim 20, see claim 3 of 130' patent.
- j. As per claim 21, see claim 5 of 130' patent.
- k. As per claim 25, the receiving unit is taught in Nakamura (hard disk 205 stores the converted image data. The motivation for combining is provided above.
- l. As per claim 26, see explanation in claim 9 and 25 above.

***Allowable Subject Matter***

8. Claims 6, 8, 10, 17-19 and 22, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2624

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y. Lu whose telephone number is (571) 272-7393. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571)-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tom Y Lu/

Primary Examiner, Art Unit 2624